

What is claimed is:

1. A method of recycling building materials comprising a shingle including an asphalt filler material from a glass substrate of said shingle having a combustible portion and a noncombustible portion into a fuel and useful residue material, comprising:

5 feeding said shingle to a fluidized bed boiler having a fuel feed system and a lime feed system, and wherein the amount of lime fed into the boiler is reduced based on the amount of lime in the asphalt filler;

 introducing building materials comprising a shingle including an asphalt material from a glass substrate of said shingle into a combustion chamber;

10 combusting the asphalt material from the glass substrate of the shingle as a fuel within the combustion chamber;

 using the noncombustible portion of the building materials as one of a clinker material wherein said substrate is incorporated into said clinker material as a source of minerals for said clinker material or wherein an inorganic portion of the building materials comprising a

15 filler in said asphalt is used as an emissions reduction material in a boiler; and

 reducing an amount of a material for said one of the clinker material and emissions reduction material due to the noncombustible portion of the building materials.

2. A method according to claim 1, wherein the building materials comprise shingles.

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3. A method according to claim 2, wherein the shingles comprise asphalt and wherein the recycling process further comprising the steps of combusting said asphalt and an organic substrate of the shingle.

4. A method according to claim 3, wherein the shingle further comprises an asphalt filler and wherein said shingle comprises surface granules, said granules providing a source of lime as an emissions reduction material in a boiler.
- 5 5. A method according to claim 2, wherein the shingles comprise surface granules and asphalt with a filler, the method further comprising the steps of:
combusting said asphalt from a glass substrate of the shingle; and
incorporating a noncombustible portion of the shingle in a bed of the boiler as an emissions reduction material.
- 10 6. A method according to claim 2, wherein the shingle comprises a filled resinous material, the recycling process further comprising the steps of:
combusting a resin from a filler material of the shingle; and
using said filler as an emissions reduction material in a boiler.
- 15 7. A method according to claim 1, further comprising:
removing the building materials from a building before introducing the building materials into a cement kiln or a boiler.
- 20 8. A method according to claim 7, wherein the building materials comprise siding.
9. A method of recycling a shingle into a fuel and useful residue material, comprising:
introducing the shingle into a combustion chamber of a fluidized bed boiler having a fuel feed system and a lime feed system;
25 combusting an asphalt material from a glass substrate of the shingle as a fuel within the combustion chamber; and
using a filler in said asphalt as an emissions reduction material in the boiler, wherein an amount of lime fed into the boiler is reduced based on an amount of lime in the asphalt filler.

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10. A method according to claim 9, wherein the asphalt is filled with a limestone or dolomitic material and the limestone or dolomitic material provides a source of lime to reduce an amount of sulfur emissions from the boiler.

5 11. A method according to claim 10, wherein the shingle further comprises surface granules, said granules providing a source of bed material in said boiler.

12. A method according to claim 10, wherein said shingle comprises scrap from a manufacture of roofing shingles.

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13. A method according to claim 9, wherein said shingle is removed from a building along with further building materials selected from the group consisting of nails, wood, felt paper, ice shield, and roofing accessories, and wherein each of said further building materials provides fuel or bed materials for said boiler.

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